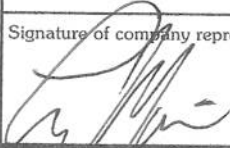
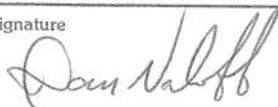




WASHINGTON STATE DEPARTMENT OF  
**Natural Resources**

**COUNTY OR MUNICIPALITY  
APPROVAL FOR  
SURFACE MINING  
(Form SM-6)**

<b>NAME OF COMPANY OR INDIVIDUAL APPLICANT(S)</b> Same as name of the exploration permit holder. (Type or print in ink.)  Ellensburg Cement Products		<b>TOTAL ACREAGE AND DEPTH OF PERMIT AREA</b> (Include all acreage to be disturbed by mining, setbacks, and buffers, and associated activities during the life of the mine.) (See SM-8A.) Total area disturbed will be <u>37</u> acres Maximum vertical depth below pre-mining topographic grade is <u>80</u> feet Maximum depth of excavated mine floor is <u>2670</u> feet relative to mean sea level				
<b>MAILING ADDRESS</b>  P.O. Box 938 Ellensburg Wa 98926  Telephone 509 933 7050		<b>COUNTY</b> <u>Kittitas</u> No attachments will be accepted. Legal description of permit area:				
		1/4	1/4	Section	Township	Range
		sw	sw	3	19 <del>N</del>	17E
		nw	nw	10	19N	17E
<b>Proposed subsequent use of site upon completion of reclamation</b>  Dryland Grazing						
<b>Signature of company representative or individual applicant(s)</b> 		<b>Name and title of company representative (please print)</b> Lenny Morrison Enviro Manager		<b>Date signed</b> 7.7.09		
<b>TO BE COMPLETED BY THE APPROPRIATE COUNTY OR MUNICIPALITY:</b> Please answer the following questions 'yes' or 'no'. 1. Has the proposed surface mine been approved under local zoning and land-use regulations? 2. Is the proposed subsequent use of the land after reclamation consistent with the local land-use plan/designation? When complete, return this form to the appropriate Department of Natural Resources regional office.						
<b>Name of planning director or administrative official (please print)</b> Dan Valoff		<b>Address</b> Kittitas County CDS 411 N. Ruby St Ellensburg, WA 98926				
<b>Signature</b> 						
<b>Title (please print)</b> Staff Planner						
<b>Telephone</b> (509) 962-7637	<b>Date</b> 7-2-09	<b>DNR Reclamation Permit No.</b> 70012752				

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**APPLICATION FOR RECLAMATION PERMIT  
FORM SM-8A**Check appropriate box(es): ☐ new permit ☒ revision of existing permit ☐ transfer of permit ☒ expansion**NOTE: Do not attempt to complete this form until you have carefully read the accompanying instruction document (SM8AINST.PDF). Do not attempt to use this form as an MS Word Template unless you are familiar with the use of templates in MS Word.**

<b>1. NAME OF APPLICANT/PERMIT HOLDER(S)</b> Ellensburg Cement Products					<b>12. Are all of these mines now in compliance with RCW 78.44, WAC 332-18, and conditions of the permits?</b> <input checked="" type="checkbox"/> yes <input type="checkbox"/> no																																	
<b>2. MAILING ADDRESS</b> P.O. Box 938 Ellensburg Wa 98926					<b>13. Have you ever had a surface mine operating or reclamation permit revoked?</b> <input type="checkbox"/> yes <input checked="" type="checkbox"/> no  <b>Have you ever had a reclamation security forfeited?</b> <input type="checkbox"/> yes <input checked="" type="checkbox"/> no If you answered yes to either of the above, list the permit number(s):																																	
<b>3. Telephone</b> 509 933 7050 <b>UBI No.</b> 192 001 565					<b>14. Type of proposed or existing mine:</b> <input type="checkbox"/> pit <input checked="" type="checkbox"/> quarry <b>Material(s) to be mined:</b> <input type="checkbox"/> sand and gravel <input checked="" type="checkbox"/> rock or stone <input type="checkbox"/> clay <input type="checkbox"/> metal <input type="checkbox"/> limestone <input type="checkbox"/> silica <input type="checkbox"/> other _____  <b>Deposit type:</b> <input type="checkbox"/> glacial <input type="checkbox"/> river floodplain (alluvial) <input type="checkbox"/> river channel deposits <input type="checkbox"/> talus <input checked="" type="checkbox"/> bedrock <input type="checkbox"/> lode <input type="checkbox"/> unknown <input type="checkbox"/> other _____																																	
<b>4. NAME OF MINE</b> Thomas quarry					<b>15. Total Acreage and Depth of Permit Area:</b> (Include all acreage to be disturbed by mining, setbacks, buffers, and associated activities during the life of the mine.) (See Form SM-6.)  Total area disturbed will be <u>37</u> acres. Area to be disturbed in next 36 months will be 3 acres.  Maximum vertical depth below pre-mining topographic grade is <u>80</u> feet. Maximum depth of excavated mine floor is <u>2670</u> feet relative to mean sea level																																	
<b>5. Street address and milepost of surface mine</b> 20751 State Route 97 MP 146.9					<b>16. Expected start date of mining</b> <b>October 2009</b>																																	
<b>6. Distance (miles)</b> <b>14</b>					<b>17. Estimated number of years</b> <b>30</b>																																	
<b>7. Direction from</b> <b>N</b>					<b>18. Total quantity to be mined over life of mine (estimated):</b> <b>750,000</b> <input checked="" type="checkbox"/> tons, or <input type="checkbox"/> cu yds																																	
<b>8. Nearest community</b> <b>Ellensburg</b>					<b>19. Estimated annual production:</b> <b>35,000</b> <input checked="" type="checkbox"/> tons, or <input type="checkbox"/> cu yds																																	
<b>9. COUNTY</b> <u>Kittitas</u> No attachments will be accepted. Legal Description of permit area: <table border="1"><thead><tr><th>¼</th><th>¼</th><th>Section</th><th>Township</th><th>Range</th></tr></thead><tbody><tr><td>Sw</td><td>Sw</td><td>3</td><td>19N</td><td>17E</td></tr><tr><td>NW</td><td>NW</td><td>10</td><td>19N</td><td>17E</td></tr><tr><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td></tr></tbody></table>										¼	¼	Section	Township	Range	Sw	Sw	3	19N	17E	NW	NW	10	19N	17E														
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<b>10. TOTAL ACREAGE OF PERMIT AREA APPLIED FOR</b> (include all acreage to be disturbed by mining, setbacks, buffers, and associated activities during the life of the mine.) <b>37 acres</b>																																						
<b>11. Do you or any person, partnership, or corporation associated with you now hold, or have you held, a surface mining operating or reclamation permit?</b> <input checked="" type="checkbox"/> yes <input type="checkbox"/> no If you answered yes to the above, please list: <table border="1"><thead><tr><th rowspan="2">Permit Number</th><th colspan="2">Active Operation?</th><th colspan="2">Reclamation current/complete?</th></tr><tr><th>Yes</th><th>No</th><th>Yes</th><th>No</th></tr></thead><tbody><tr><td>70012735/ 70012970/ 70012954</td><td>X</td><td><input type="checkbox"/></td><td>X</td><td><input type="checkbox"/></td></tr><tr><td>70010239/ 70012390/ 70012752</td><td>X</td><td><input type="checkbox"/></td><td>X</td><td><input type="checkbox"/></td></tr><tr><td>70012673/ 70012825/ 70011260</td><td>X</td><td><input type="checkbox"/></td><td>X</td><td><input type="checkbox"/></td></tr><tr><td>70012757/ 70012858/ 70013090</td><td>X</td><td><input type="checkbox"/></td><td>X</td><td><input type="checkbox"/></td></tr></tbody></table>										Permit Number	Active Operation?		Reclamation current/complete?		Yes	No	Yes	No	70012735/ 70012970/ 70012954	X	<input type="checkbox"/>	X	<input type="checkbox"/>	70010239/ 70012390/ 70012752	X	<input type="checkbox"/>	X	<input type="checkbox"/>	70012673/ 70012825/ 70011260	X	<input type="checkbox"/>	X	<input type="checkbox"/>	70012757/ 70012858/ 70013090	X	<input type="checkbox"/>	X	<input type="checkbox"/>
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<b>20. Subsequent land use:</b> <input type="checkbox"/> industrial <input type="checkbox"/> commercial <input type="checkbox"/> residential <input type="checkbox"/> agricultural <input type="checkbox"/> forestry <input type="checkbox"/> wetlands and lakes <input checked="" type="checkbox"/> Other Dryland Grazing  Reclaimed elevation of floor of mine: <u>2670</u> feet relative to mean sea level  Reclaimed elevation is shown on cross sections? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no  Subsequent land use is compatible with County or Municipal comprehensive plan? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no  County or Municipality Approval for Surface Mining (Form SM-6) attached? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no  SEPA Checklist required? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no  If any answers are no, explain: _____																																						
<b>21. Application fee for a new reclamation permit is herewith attached?</b> <input checked="" type="checkbox"/> yes <input type="checkbox"/> no																																						

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## CHECKLIST OF RECLAMATION STANDARDS

### 22. SEGMENTAL RECLAMATION

Permit area has been divided into segments for mining and a mining schedule has been developed? X yes ☐ no  
 If no, explain:

Permit area has been divided into segments for reclamation and a reclamation schedule has been developed? X yes ☐ no  
 If no, explain:

### 23. SITE PREPARATION

#### 23A. Permit and Disturbed Area Boundaries

Boundary of the permit area has been marked on the ground with permanent boundary markers? X yes ☐ no  
 Explain boundary markers: **Painted T posts at permit boundaries**

#### 23B. Saving Topsoil, Subsoil, and Overburden for Reclamation

Thickness of topsoil is 1 feet  
 Thickness of subsoil is 0 -4 feet  
 Depth to bedrock is 1-4 feet  
 Total volume of topsoil is 30,600 cubic yards  
 Total volume of subsoil is 91,960 cubic yards  
 Volume of stored topsoil/subsoil is 122560 cubic yards and will require 2.75 acres for storage.

Storage areas are shown on maps and have been marked on the ground with permanent boundary markers? X yes ☐ no

Topsoil will be salvaged? X yes ☐ no  
 If no, explain:

Topsoil and overburden will be moved to reclaim an adjacent depleted segment? yes X no  
 If no, explain: **Topsoil will be held in storage for reclamation when needed**

Before materials are moved, vegetation will be cleared and drainage planned for soil storage areas? X yes ☐ no  
 If no, explain:

Soil storage areas will be stabilized with vegetation to prevent erosion if materials will be stored for more than one season? X yes ☐ no  
 If no, explain:

#### 23C. Setbacks and Screens

Maximum depth of the mine will be 80 feet from 2750 feet (*highest*) to 2670 feet (*lowest*) elevation relative to mean sea level..

The setback for this site will be 30 feet wide.

Is a permanent, undisturbed buffer planned for this site? X yes ☐ no  
 If no, explain:

Setbacks are shown on maps and have been marked on the ground with permanent boundary markers? X yes ☐ no  
 If no, explain:

## CHECKLIST OF RECLAMATION STANDARDS

Does this site have a backfilling plan that addresses the protection of adjacent property and how the final, stable slopes are to be achieved? If no, explain:		<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
<b>23D. Buffers to Protect Streams and Flood Plains</b>		
<i>If yes, see "Additional Information Requirements for Flood Plain Mines." This document is included in the SM8AINST.PDF file.</i>		
A stream buffer of at least 200 feet has been marked on the ground with permanent boundary markers?		<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
A buffer of at least 200 feet from the 100-year flood plain has been marked on the ground with permanent boundary markers?		<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
If no, explain: <b>The quarry is not in the flood plain</b>		
Copy of Shoreline Permit from local government or the Dept of Ecology is attached?		<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Hydraulic Project Approval from the Department of Fish and Wildlife is attached?		<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
<b>23E. Conservation Buffers</b>		
Conservation buffers will be established for the following purpose(s): ( <i>Check all that apply</i> ) <input type="checkbox"/> unstable slopes <input type="checkbox"/> wildlife habitat <input type="checkbox"/> water quality <input checked="" type="checkbox"/> other <u>N/A</u>		
Describe the nature and configuration of the conservation buffer(s):		
Conservation setbacks are shown on maps and have been marked on the ground with permanent boundary markers?		<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
<b>23F. Ground Water</b>		
High water table depth is _____ feet <input type="checkbox"/> relative to mean sea level, <input type="checkbox"/> below original surface, or <input checked="" type="checkbox"/> unknown.		
Low water table depth is _____ feet <input type="checkbox"/> relative to mean sea level, <input type="checkbox"/> below original surface, or <input checked="" type="checkbox"/> unknown.		
Annual fluctuation of water table is from _____ feet on _____ to _____ feet on _____. Unknown		
Direction of ground water flow: <u>Unknown</u>		
Are well logs attached?		<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Is the aquifer perched?		<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Is the shallowest aquifer:   confined <input checked="" type="checkbox"/> unconfined   Unknown		
The site will be mined: <input type="checkbox"/> wet <input checked="" type="checkbox"/> dry <input type="checkbox"/> both		
Describe mining method: <b>Material will be mined using the drilled and shot method, and then moved to crusher by loader for processing or loading dump trucks.</b>		
The site is in a: <u>N/A</u>		
<input type="checkbox"/> critical aquifer recharge area <input type="checkbox"/> sole source aquifer <input type="checkbox"/> public water supply watershed <input type="checkbox"/> wellhead protection area <input type="checkbox"/> special protection area <input type="checkbox"/> designated aquifer protection area		
Ground water study attached?		<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
<i>If yes, see "Additional Information Requirements for Hydrologically Sensitive Areas." This document is included in the SM8AINST.PDF file.</i>		
If no, explain: <b>There are no wells in the immediate area.</b>		

## CHECKLIST OF RECLAMATION STANDARDS

### 23G. Archeology

Are archeological/cultural resource sites present?

☐ yes ☒ no

If yes, describe how you will protect these resources:

### 24. MINING PRACTICES TO FACILITATE RECLAMATION

#### 24A. Soil Replacement

Topsoil will be saved?

☒ yes ☐ no

If no, explain:

Up to 4 feet of topsoil and (or) subsoil will be restored?

☒ yes ☐ no

If no, explain:

Topsoil will be restored and seedbeds prepared as necessary to promote effective revegetation and to stabilize slopes and mine floor?

☒ yes ☐ no

If "yes" give details, if "no", explain: **Topsoil will be stockpiled and seeded to prevent erosion while in storage. When reclamation begins it will be distributed where needed and seeded according to reclamation sequence.**

Subsoil will be replaced to an approximate depth of 2.0 feet on the pit floor and a depth of 0 feet on slopes.

Topsoil will be replaced to an approximate depth of .5 feet on the pit floor and a depth of 0 feet on slopes.

Topsoil will be distributed evenly over the site?

☒ yes ☐ no

If no, explain: **Topsoil will not be used on the rubble slope**

If topsoil is in short supply, it will be strategically placed in depressions and low areas in adequate thickness to conserve moisture and promote revegetation?

☒ yes ☐ no

If no, explain:

Topsoil will be moved when conditions are not overly wet or dry?

☒ yes ☐ no

If no, explain:

Topsoil will be imported?

☒ yes ☐ no

If yes, describe source. If no, explain: **Topsoil should be of adequate supply, the company does not anticipate importing topsoil. Although if clean topsoil becomes available it may be imported and used in final reclamation**

Synthetic topsoil made from compost, biosolids, or other amendments will be used and (or) made on site to supplement existing topsoil?

☐ yes ☒ no

If yes, explain:

## CHECKLIST OF RECLAMATION STANDARDS

<p>Materials such as till, loess, and (or) silt are available on site that could be used to supplement topsoil for reclamation.          If yes, explain: <b>Screened materials from crushing will be used to supplement in reclamation</b></p>	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
<p>Silt from settling ponds or a filter press will be used for reclamation?          If yes, explain:</p>	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
<p>Settling pond clay slurries will be pumped or hauled to other segments for reclamation?          If yes, explain:</p>	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
<p>Topsoil will be replaced with equipment that will minimize compaction, or it will be plowed, disked, or ripped following placement?          If no, explain: <b>Most areas an excavator will be used to place topsoil, this will minimize compacting topsoil.</b></p>	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
<p>Topsoil will be immediately stabilized with grasses and legumes to prevent loss by erosion, slumping, or crusting?          If no, explain: <b>Due to the limited rainfall in this area seeding will take place in the fall of the year to promote early spring growth</b></p>	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
<p>Topsoil stockpile areas are shown on maps and will be marked on the ground with permanent boundary markers to protect from loss?          If no, explain:</p>	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
<p>Segmental topsoil removal and replacement is shown on maps?          If no, explain:</p>	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
<p>Topsoil salvage and replacement plan included?          If no, explain:</p>	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
<b>24B. Removal of Vegetation</b>	
<p>Vegetation will be removed sequentially from areas to be mined to prevent unnecessary erosion?          If no, explain:</p>	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
<p>Small trees and other transplantable vegetation will be salvaged for use in revegetating other segments?          If yes, give details. If no, explain: <b>No small trees exist in the area to be mined</b></p>	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no



## CHECKLIST OF RECLAMATION STANDARDS

Wood and other organic debris will be: <input type="checkbox"/> recycled <input type="checkbox"/> removed from site <input type="checkbox"/> chipped <input type="checkbox"/> burned <input type="checkbox"/> buried <input type="checkbox"/> used to synthesize topsoil or mulch X other ( <i>explain</i> ) <b>Where grasses exist they will be mixed with the topsoil stockpile</b>	
Solid waste disposal, burning, and land use permits are attached?	<input type="checkbox"/> yes    X no
Some coarse wood (logs, stumps) and other large debris will be salvaged for fish and wildlife habitats?    X yes <input type="checkbox"/> no If yes, give details. If no, explain: <b>Some larger stumps may be imported and placed on reclaimed pit floor for habitat, if available from off mine site occurs</b>	
<b>24C. Erosion control for Reclamation</b>	
Pit floor will slope at gentle angles toward highwall, sediment retention pond, or proper drainage?    X yes <input type="checkbox"/> no If yes, give details. If no, explain: <b>Pit floor will slope to the south end with pit enclosed with side slopes</b>	
Revegetation, sheeting, and (or) matting will be used to protect areas susceptible to erosion?    X yes <input type="checkbox"/> no If yes, give details. If no, explain: <b>Slopes where erosion may take place will be Re vegetated topsoil stock piles will be seeded</b>	
Water control systems used for erosion control during segmental reclamation will: Divert clean water around pit?    X yes <input type="checkbox"/> no Trap sediment-laden runoff before it enters a stream?    X yes <input type="checkbox"/> no Result in essentially natural conditions of volume, velocity, and turbidity?    X yes <input type="checkbox"/> no Handle a 25-year, 24-hour peak event?    X yes <input type="checkbox"/> no ( <i>Have you attached calculation?</i> )    X yes <input type="checkbox"/> no Be removed or reclaimed?    X yes <input type="checkbox"/> no If any answers are no, explain:	
Will any water control systems be removed upon final reclamation?    yes    X no If yes, explain: <b>Control systems required by DOE will remain</b>	
Water control measure will be established to prevent erosion of setbacks and neighboring properties?    X yes <input type="checkbox"/> no If yes, give details. If no, explain: <b>Disturbed areas will be contained and/or seeded Topsoil piles and berms will be seeded, quarry is a depression and drains into itself.</b>	
Storm-water conveyance ditches and channels will be lined with vegetation or riprap?    yes    X no If yes, give details. If no, explain: <b>Ditches will be seeded. Soils contain adequate large gravels to control erosion</b>	
Natural and other drainage channels will be kept free of equipment, wastes, stockpiles, and overburden?    X yes <input type="checkbox"/> no If no, explain:	



# CHECKLIST OF RECLAMATION STANDARDS

<b>25. RECLAMATION TOPOGRAPHY</b>	
<b>25A. Final Slopes</b>	
Final slopes will be created using the cut-and-fill method? Explain procedure to be used: <b>Slopes will be left as a rubble slope @2:1 to 3:1 to blend with adjacent slope conditions outside the mine area.</b>	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
Slopes will be created by mining to the final slope using the cut method? Explain procedure to be used: <b>Drilling and blasting. Slopes will be left as rubble slopes with no cliffs</b>	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Slopes will vary in steepness? If no, explain:	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Slopes will have a sinuous appearance in both profile and plan view? If no, explain:	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Large rectilinear (that is, right angle, or straight, planar) areas will be eliminated? If no, explain:	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
Where reasonable, tracks of the final equipment pass will be preserved and oriented to trap moisture, soil, and seeds, and to inhibit erosion? If no, explain:	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
<b>25B. Slope Requirements for Pits and Overburden/Waste Rock Dumps (non-saleable products)</b>	
<i>If the mine is a quarry or in hard rock, skip to Quarry section(25C).</i>	
Slopes will vary between 2 and 3 feet horizontal to 1 foot vertical or flatter, except in limited areas where steeper slopes are necessary to create sinuous topography and control drainage? If no, explain:	<input type="checkbox"/> yes <input type="checkbox"/> no
For pits, slopes will not exceed 2 feet horizontal to 1 foot vertical except as necessary to blend with adjacent natural slopes? Give details:	<input type="checkbox"/> yes <input type="checkbox"/> no
Slope stability analysis required? <i>If yes, see "Additional Information Requirements for Mines with Potentially Unstable or Steep Slopes." This document is included in the SM8AINST.PDF file.</i> Slope stability analysis provided by _____	<input type="checkbox"/> yes <input type="checkbox"/> no
<b>25C. Slope Requirements for Quarries and Hardrock Metal Mines</b>	
<i>If mine is a pit in unconsolidated materials covered by Section 25B, go to Section 25D</i>	

## CHECKLIST OF RECLAMATION STANDARDS

Check the appropriate box(es)

☒ Slopes will not exceed 2 feet horizontal to 1 foot vertical.

☐ Slopes steeper than 1 foot horizontal to 1 foot vertical are an acceptable subsequent land use as confirmed on Form SM-6.

☐ Hazardous slopes or cliffs are indigenous to the immediate area and already present a potential threat to human life. Photo and maps attached to document presence of cliffs.

☐ Geologic or topographic characteristics of the site preclude slopes being reclaimed at a flatter angle and are an acceptable subsequent land use as confirmed on Form SM-6.

Slope stability analysis required?

☐ yes ☒ no

*If yes, see "Additional Information Requirements for Mines with Potentially Unstable or Steep Slopes." This document is included in the SM8AINST.PDF file.*

Slope stability analysis provided by \_\_\_\_\_

Measures will be taken to limit access to the top and bottom of hazardous slopes?

☒ yes ☐ no

Describe measures, or if no, explain: **Berms will be placed around mine area as required by MSHA and company safety plan. Signs are posted to warn of mining and to deter trespassers, site is gated and locked.**

Selective blasting will be used to remove benches and walls and to create chutes, buttresses, spurs, scree slopes, and rough cliff faces that appear natural?

☐ yes ☒ no

Describe procedures, or if no, explain: **Blasting will be used to create a rubble slope to blend with natural slopes adjacent to the permit boundary.**

Reclamation blasting will be used to reduce the entire highwall to a scree or rubble slope less than 2 feet horizontal to 1 foot vertical?

☒ yes ☐ no

Blasting plan is attached?

☐ yes ☒ no

If no, explain: **The composition of the material below existing floor will not be known until exploratory drilling takes place. A drilling plan will be made and put in to effect when this information is available**

Access to benches will be maintained for reclamation blasting?

☐ yes ☒ no

If no, explain: **No benches are necessary it will be mined to final slope. Some ledge or possible small outcroppings of solid basalt maybe left for cliff dwelling birds and other habitat.**

Small portions of benches will be left to provide habitat for raptors and other cliff-dwelling birds?

☒ yes ☐ no

### 25D. Backfilling

Slopes will require backfilling?

☐ yes ☒ no

Depth of backfilling is \_\_\_\_\_ feet.

Slope stability compaction analysis required?

☐ yes ☒ no

Compaction analysis provided by \_\_\_\_\_

Backfilling plan and (or) permits are attached?

☐ yes ☒ no

If no, explain: **Back filling is not anticipated however if clean fill becomes available it may be imported for re-processing and /or use in final reclamation**

Backfilling will be done with overburden material after topsoil has been separated?

☒ yes ☐ no

If no, describe composition and source of backfill material:

Explain method of placement of fill: **Subsoil may be hauled to area to be filled, and then be placed by dozer**

## CHECKLIST OF RECLAMATION STANDARDS

or excavator depending on equipment on site. Topsoil will be placed over subsoil then seeded in the fall of the year, clean fill from off site may be processed and stored in mine. Some clean fill may remain in the mine upon final reclamation.

Locations of stockpiles are shown on maps and will be marked on the ground with permanent boundary markers?	X yes <input type="checkbox"/> no
Will backfill be imported? If yes, give volumes needed to meet reclamation plan: <b>Plan does not require backfill all though it may be decided to backfill some slopes that do not meet the required 2:1 sloping after blasting. Volumes will not be known until time of reclamation</b>	X yes   no
Areas to be backfilled are shown on maps? If no, explain: <b>Areas of possible backfill will be unknown until final reclamation. A written report will be submitted to DNR if imported fill is to remain onsite at final reclamation.</b>	<input type="checkbox"/> yes   X no
All grading/backfilling will be done with clean, inert, non-organic solids? If yes, give details. If no, explain: <b>If backfill is used, it will be generated by using screened materials from the crushing process and materials hauled in from off site using only non organic, clean materials.</b>	X yes   no
Backfilled slopes will be compacted? If yes, give details. If no, explain: <b>Slopes will be rubble slope</b>	<input type="checkbox"/> yes   X no
Will you be backfilling into water? If yes, is slope stability analysis attached? If yes, describe method: <b>N/A</b>	<input type="checkbox"/> yes   X no <input type="checkbox"/> yes <input type="checkbox"/> no
<b>25E. Mine Floors</b>	
Flat areas will be formed into gently rolling mounds? If yes, give details. If no, Explain: <b>Hard spots in mine floor will provide adequate mounds in final reclamation</b>	X yes <input type="checkbox"/> no
Mine floor will be gently graded into sinuous drainage channels to preclude sheetwash erosion during intense precipitation? If yes, give details. If no, explain: <b>Mine floor will be sloped toward the south. Sloping of floor with the slope of walls will keep any storm water in mine and will infiltrate the ground. Mine is an enclosed basin.</b>	X yes <input type="checkbox"/> no
Mine floor and other compacted areas will be bulldozed, plowed, ripped, or blasted to foster revegetation? If yes, give details. If no, explain: <b>In areas where required the floor will be ripped. The quarry floor is basalt with voids</b>	yes   X no
<b>25F. Lakes, Ponds, and Wetlands</b>	

## CHECKLIST OF RECLAMATION STANDARDS

Is water currently present in the area or will the mining penetrate the water table? <i>If no, go to Section 25G.</i>	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no								
Reclaimed areas below the permanent low water table in soil, sand, gravel, and other unconsolidated material will have a slope no steeper than 1.5 feet horizontal to 1 foot vertical? If yes, give details. If no, explain:	<input type="checkbox"/> yes <input type="checkbox"/> no								
If not already present, soils, silts, and clay-bearing material will be placed below water level to enhance revegetation? If yes, give details. If no, explain:	<input type="checkbox"/> yes <input type="checkbox"/> no								
Some parts of pond and lake banks will be shaped so that a person can escape from the water? If yes, give details. If no, explain:	<input type="checkbox"/> yes <input type="checkbox"/> no								
Armored spillways or other measures to prevent undesirable overflow or seepage will be provided to stabilize bodies of water and adjacent slopes? If yes, give details. If no, explain:	<input type="checkbox"/> yes <input type="checkbox"/> no								
Wildlife habitat will be developed, incorporating such measures as: Sinuous and irregular shorelines? Varied water depths? Shallow areas less than 18 inches deep? Islands and peninsulas? Give details:	<table style="margin-left: auto; margin-right: 0;"> <tr> <td><input type="checkbox"/> yes</td> <td><input type="checkbox"/> no</td> </tr> <tr> <td><input type="checkbox"/> yes</td> <td><input type="checkbox"/> no</td> </tr> <tr> <td><input type="checkbox"/> yes</td> <td><input type="checkbox"/> no</td> </tr> <tr> <td><input type="checkbox"/> yes</td> <td><input type="checkbox"/> no</td> </tr> </table>	<input type="checkbox"/> yes	<input type="checkbox"/> no	<input type="checkbox"/> yes	<input type="checkbox"/> no	<input type="checkbox"/> yes	<input type="checkbox"/> no	<input type="checkbox"/> yes	<input type="checkbox"/> no
<input type="checkbox"/> yes	<input type="checkbox"/> no								
<input type="checkbox"/> yes	<input type="checkbox"/> no								
<input type="checkbox"/> yes	<input type="checkbox"/> no								
<input type="checkbox"/> yes	<input type="checkbox"/> no								
Ponds or basins will: Be located in stable areas? Have sufficient volume for expected runoff? Have an emergency overflow spillway? Spillways and outfalls will be protected (for example, rock armor) to prevent failure and erosion? If any answers are no, explain:	<table style="margin-left: auto; margin-right: 0;"> <tr> <td>yes</td> <td><input type="checkbox"/> no</td> </tr> <tr> <td>yes</td> <td><input type="checkbox"/> no</td> </tr> <tr> <td><input type="checkbox"/> yes</td> <td>no</td> </tr> <tr> <td><input type="checkbox"/> yes</td> <td>no</td> </tr> </table>	yes	<input type="checkbox"/> no	yes	<input type="checkbox"/> no	<input type="checkbox"/> yes	no	<input type="checkbox"/> yes	no
yes	<input type="checkbox"/> no								
yes	<input type="checkbox"/> no								
<input type="checkbox"/> yes	no								
<input type="checkbox"/> yes	no								
Proper measures will be taken to prevent seepage from water impoundments that could cause flooding outside the permitted area or adversely affect the stability of impoundment dams or adjacent slopes? If yes, give details. If no, explain:	yes <input type="checkbox"/> no								
Written approval from other agencies with jurisdiction to regulate impoundment of water is attached? If no, explain	<input type="checkbox"/> yes    no								

## CHECKLIST OF RECLAMATION STANDARDS

### 25G. FINAL DRAINAGE CONFIGURATION

Drainage will be capable of carrying the peak flow of the 25-year, 24-hour precipitation event (*Data are available at DNR Region offices*)

If yes, are calculations attached?

X yes ☐ no

X yes ☐ no

If yes, give details. If no, explain: **Rainfall will be absorbed by topsoil stock piles and crushed rock material stock piles along with the containment ditches. Plus the main quarry being 80 feet deep with water able to infiltrate the mine floor will easily hold a 24 hour 25 year event. 25 year 24 hour. Event = approx 2". 2"x 43560 sq. ft. (1 acre) = 6969 cu. ft. x 37 acres = 257,853**

Drainages will be constructed on each reclaimed segment to control surface water, erosion, and siltation?

☐ yes X no

Clean runoff is directed to a safe outlet?

X yes ☐ no

If either yes, give details. If no, explain: **Site run off flows to a filtration containment ditching system.**

**The floor of the pit is sloped to the wall to hold Surface water / storm water**

Are these shown on maps?

X yes ☐ no

The grade of ditches and channels will be constructed to limit erosion and siltation?

X yes ☐ no

If yes, give details. If no, explain: **The ditching is a gentle and naturally rock armored grade.**

Natural-appearing drainage channels will be established upon reclamation?

X yes ☐ no

If yes, give details. If no, explain: **Ditching is in place and has been seeded**

### 26. SITE CLEANUP AND PREPARATION FOR REVEGETATION

#### 26A. Dealing with Hazardous Materials

Hazardous materials are present at the mine site?

yes X no

*If no, go to Section 25B*

The final ground surface drains away from any hazardous natural materials?

yes X no

If yes, give details. If no, explain: **The Diesel held on site is in a contained unit.**

Plan for handling hazardous mineral wastes indigenous to the site is attached?

☐ yes ☐ no

If no, written approval from all appropriate solid waste regulatory agencies attached?

☐ yes ☐ no

#### 26B. Removal of Debris

All debris (garbage, 'bone piles', treated wood, old mining equipment, etc.) will be removed from the mine site?

X yes ☐ no

All sheds, scale houses, and other structures will be removed from the site?

X yes ☐ no

If either answer is yes, give details. If no, explain: **All garbage is removed weekly. Scale and scale shack are property of company**

### 27. REVEGETATION

The mine site is in: X eastern Washington

☐ western Washington

The mine site is: ☐ wet X dry?

The average precipitation is 22" per year.

Revegetation will start during the first proper growing season (fall for grasses and legumes, fall or late winter for trees and shrubs) following restoration of slopes?

X yes ☐ no



## CHECKLIST OF RECLAMATION STANDARDS

If yes, give details. If no, explain: **Planting of grass will be the first fall of the year after final topsoil.**

Test plots will be used to determine optimum vegetation plans? ☐ yes ☒ no

The site will not be revegetated because: N/A

☐ It is a rural area with a rainfall exceeding 30 inches annually and erosion will not be a problem (requires approval of DNR).

☐ Demonstration plots and areas will be used to show that active revegetation is not necessary.

☐ Revegetation is inappropriate for the approved subsequent use of this surface mine.

Explain:

Documentation is attached? N/A

☐ yes ☐ no

### 27A. Recommended Pioneer Species

In the Sections below, check the species that will be planted at your mine site:

*\* indicates nitrogen-fixing species*

#### Western Washington Dry Areas

- |  |  |  |   |
|--|--|--|---|
| <input type="checkbox"/> alfalfa*            | <input type="checkbox"/> Lupine*       | <input type="checkbox"/> clover*             | <input type="checkbox"/> orchard grass  |
| <input type="checkbox"/> cereal rye          | <input type="checkbox"/> perennial rye | <input type="checkbox"/> colonial bent grass | <input type="checkbox"/> ponderosa pine |
| <input type="checkbox"/> creeping red fescue | <input type="checkbox"/> red alder*    | <input type="checkbox"/> Douglas fir         | <input type="checkbox"/> shore pine     |
| <input type="checkbox"/> ground cover        | <input type="checkbox"/> shrubs        | <input type="checkbox"/> other               |   |

#### Western Washington Wet Areas

- |  |  |  |                                 |
|--|--|--|---------------------------------|
| <input type="checkbox"/> birdsfoot trefoil | <input type="checkbox"/> sedges          | <input type="checkbox"/> cedar               | <input type="checkbox"/> tubers |
| <input type="checkbox"/> cottonwood        | <input type="checkbox"/> wetland grasses | <input type="checkbox"/> creeping red fescue | <input type="checkbox"/> willow |
| <input type="checkbox"/> red alder*        | <input type="checkbox"/> other           |  |                                 |

#### Eastern Washington Dry Areas

- |   |   |                                   |   |
|---|---|-----------------------------------|---|
| <input type="checkbox"/> alder*             | <input checked="" type="checkbox"/> grasses | <input type="checkbox"/> alfalfa* | <input type="checkbox"/> juniper                  |
| <input type="checkbox"/> black locust       | <input type="checkbox"/> lodgepole pine     | <input type="checkbox"/> clover   | <input type="checkbox"/> lupine*                  |
| <input type="checkbox"/> deciduous trees    | <input type="checkbox"/> ponderosa pine     | <input type="checkbox"/> shrubs   | <input type="checkbox"/> deep-rooted ground cover |
| <input type="checkbox"/> diverse evergreens | <input type="checkbox"/> other              |                                   |   |

#### Eastern Washington Wet Areas

- |                                       |                                     |                                 |                                 |
|---------------------------------------|-------------------------------------|---------------------------------|---------------------------------|
| <input type="checkbox"/> alder*       | <input type="checkbox"/> cottonwood | <input type="checkbox"/> poplar | <input type="checkbox"/> sedges |
| <input type="checkbox"/> serviceberry | <input type="checkbox"/> tubers     | <input type="checkbox"/> willow |                                 |
| <input type="checkbox"/> other        |                                     |                                 |                                 |

Give planting details (stems/acres of trees and shrubs, see Forest Practices manual; lbs/acre of grass, legume, or forb mixture):  
**Dry land Pasture grass will be used at 25 pounds per acre ( Suggested rate) Spread by mechanical spreader and hand broadcaster**

Describe weed control plan:

**Weed control applied in spring of year and again late summer if needed, using a tank sprayer.**

### 27B. Planting Techniques

Revegetation at this site will require:

Ripping and tilling?

Blasting to create permeability?

☒ yes ☐ no

☐ yes ☒ no

## CHECKLIST OF RECLAMATION STANDARDS

<p>Mulching? <span style="float: right;"><input type="checkbox"/> yes <input checked="" type="checkbox"/> no</span></p> <p>Irrigation? <span style="float: right;"><input type="checkbox"/> yes <input checked="" type="checkbox"/> no</span></p> <p>Fertilization? <span style="float: right;"><input type="checkbox"/> yes <input checked="" type="checkbox"/> no</span></p> <p>Importation of clay- or humus-bearing soils? <span style="float: right;"><input type="checkbox"/> yes <input checked="" type="checkbox"/> no</span></p> <p>Other soil conditioners or amendments? <span style="float: right;"><input type="checkbox"/> yes <input checked="" type="checkbox"/> no</span></p> <p>Give details:</p>													
<p>Trees and shrubs will be planted in topsoil or in subsoil amended with generous amounts of organic matter? <span style="float: right;"><input type="checkbox"/> yes <input checked="" type="checkbox"/> no</span></p> <p>If yes, give details. If no, explain: <b>No trees on site, dry land grass only</b></p>													
<p>Mulch will be piled around the base of trees and shrubs? <span style="float: right;"><input type="checkbox"/> yes <input checked="" type="checkbox"/> no</span></p> <p>High quality stock will be used? <span style="float: right;"><input type="checkbox"/> yes <input checked="" type="checkbox"/> no</span></p> <p>Trees and shrubs will be planted while they are dormant? <span style="float: right;"><input type="checkbox"/> yes <input checked="" type="checkbox"/> no</span></p> <p>Stock will be properly handled, kept cool and moist, and planted as soon as possible? <span style="float: right;"><input checked="" type="checkbox"/> yes <input type="checkbox"/> no</span></p> <p>Seeds will be covered with topsoil or mulch no deeper than one-half inch? <span style="float: right;"><input type="checkbox"/> yes <input checked="" type="checkbox"/> no</span></p> <p>If any answers are no, explain: <b>No trees or shrubs</b></p>													
<b>28. FINAL CHECKLIST</b>													
All required maps are attached ( <i>See Instructions for detailed requirements</i> )?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no												
All required cross-sections are attached ( <i>See Instructions for detailed requirements</i> )?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no												
Geologic map attached (if required)?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no												
All documents submitted have the date, the name and address of the permit holder, and the application number on every page of the material?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no												
The plan contains predominantly relevant information?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no												
Have you completed the SM-6 and has it been signed by the local jurisdiction?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no												
Have you provided the SEPA checklist?	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no												
Have you provided a copy of the SEPA Determination (DNS, MDNS, or DS)?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no												
Have you attached photographs?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no												
Are additional supplemental studies included?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no												
<p>If yes, check the appropriate box(es) below:</p> <table style="width: 100%;"> <tr> <td><input type="checkbox"/> Archeological</td> <td><input type="checkbox"/> Geohydrologic</td> <td><input type="checkbox"/> Backfill</td> <td><input type="checkbox"/> Slope stability</td> </tr> <tr> <td><input type="checkbox"/> Topsoil</td> <td><input type="checkbox"/> Flood plain</td> <td><input type="checkbox"/> Conservational</td> <td><input type="checkbox"/> Vegetation</td> </tr> <tr> <td><input type="checkbox"/> Other</td> <td></td> <td></td> <td></td> </tr> </table>		<input type="checkbox"/> Archeological	<input type="checkbox"/> Geohydrologic	<input type="checkbox"/> Backfill	<input type="checkbox"/> Slope stability	<input type="checkbox"/> Topsoil	<input type="checkbox"/> Flood plain	<input type="checkbox"/> Conservational	<input type="checkbox"/> Vegetation	<input type="checkbox"/> Other			
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Other permits required?	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no												
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<input type="checkbox"/> Special or Conditional Use Permit	<input type="checkbox"/> Other												



# CHECKLIST OF RECLAMATION STANDARDS

**When signed by the applicant and approved by the Department of Natural Resources, this document and the associated maps, cross sections, reclamation narrative, and other attachments will be the approved reclamation plan for this permit that the permit holder must follow. Significant variations from the approved reclamation plan may require that a new plan be submitted to the Department for approval.**

The applicant shall be considered as the permit holder for this surface mine and shall be responsible for compliance with Chapter 78.44 RCW, Chapter 332-18 WAC, the approved reclamation plan and attachments, and the conditions of the permit if issued by the Department of Natural Resources.

I hereby agree to comply with this plan.  
Signature of applicant or company representative

Name and Title of Company Representative  
(Please print)

Date signed

*J. Jeff Hutchinson*

J. Jeff Hutchinson 7-9-2009

7-9-2009

## SURFACE OWNERSHIP

Give names, addresses, and signatures of all individuals with possessory interest in land.

(attach signed copies of this page if more than one)

I verify that the applicant has my permission to mine from my land.

Signature of landowner(s)

Date Signed

*Carle Thomas* 7/10/09

I hereby verify that I have seen and approved this plan.

Signature of landowner(s)

Date Signed

*Carle Thomas* 7/10/09

## OWNERSHIP OF RIGHTS TO REMOVE MINERALS BY SURFACE MINING

Give names, addresses, and signatures of all individuals with rights.

(attach signed copies of this page if more than one)

I verify that the applicant has my permission to mine this land.

Signature of rights owner(s)

Date Signed

*Carle Thomas* 7/10/09

I hereby verify that I have seen and approved this plan.

Signature of rights owner(s)

Date Signed

*Carle Thomas* 7/10/09

## FOR DEPARTMENTAL USE ONLY

Date accepted

Accepted by:

Title:

Reclamation Permit No.

Comments by Department: